Notice of Allowability	Application No.	Applicant(s)	
	09/868,914	MORI ET AL.	
	Examiner	Art Unit	
	Jean E Lesperance	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *10-1-2004*.

2. ☒ The allowed claim(s) is/are *1, 2, and 5-48 renumbered as 1-46*.

3. ☒ The drawings filed on *11 July 2001* are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☒ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Henry N. Tran

HENRY N. TRAN
PRIMARY EXAMINER

DETAILED ACTION

Claims 1-2 and 5-48 are presented for examination.

Allowable Subject Matter

Claims 1-2 and 5-48 are allowed.

Reasons for allowance

The following is a statement of reasons for indicating the allowable subject matter: the claimed invention is directed to a display device for selectively discharge a plurality of discharge cells to display an image. Independent claims 1 and 39 identify a uniquely distinct feature "a second driving circuit that increases a voltage of the driving pulse, to induce a second discharge subsequently to said first discharge, after the voltage of said driving pulse is reduced by said first discharge, wherein an interval between a peak of said first discharge and a peak of said second discharge is not less than 100 ns nor more than 550 ns". Independent claim 14 identifies a uniquely distinct feature "a driving circuit that applies a driving pulse to a selected discharge cell in said display panel to induce a first discharge, the driving circuit increasing a voltage of the driving pulse to induce a second discharge subsequent of said first discharge". Independent claim 32 identifies a uniquely distinct feature "a second driving circuit that increases a voltage of said driving pulse to induce second discharge subsequent to said first discharge; a detection circuit that detects a lighting rate of discharge cells simultaneously turned on out of said plurality of discharge cells; and a control circuit that

controls said first and second driving circuit such that said driving pulse is changed depending on the lighting rate detected by said detection circuit, wherein said plurality of discharge cells respectively include capacitive loads, and said first driving circuit comprises: an inductance circuit having at least one inductance element having a first end connected to said capacitive load, and a resonance driving circuit that outputs said driving pulse due to LC resonance by said capacitive load and said inductance element". Independent claim 36 identifies a uniquely distinct feature "a second driving circuit that increases the voltage of said driving pulse to induce said second discharge subsequent to said first discharge, said second driving circuit comprising: a second capacitive element provided outside said display panel as a current supply source for said driving pulse, and a voltage source that charges said second capacitive element to a predetermined". Independent claim 39 identifies a uniquely distinct feature "increasing, after a voltage of the driving pulse is reduced by the first discharge, the voltage of the driving pulse, to induce a second discharge subsequently to the first discharge, wherein an interval between a peak of the fast discharge and a peak of the second discharge is not less than 100 ns nor more than 550 us". Independent claim 43 identifies a uniquely distinct feature "applying a driving pulse to a selected discharge cell to induce a first discharge and increasing a voltage of the driving pulse to induce a second discharge subsequent to the first discharge". Independent claim 46-48 identify a uniquely distinct feature "a second driving circuit that increases a voltage of the driving pulse, to induce a second discharge subsequently to said first discharge, wherein said plurality of discharge cells respectively include capacitive loads, and said first driving

circuit comprises an inductance circuit that has at least one inductance element having a first end connected to a capacitive load, and a resonance driving circuit that drives said driving pulse due to LC resonance by said capacitive load and said inductance element".

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hashimoto et al. teach sustain discharge which is performed a specified number of times to obtain a predetermined luminance includes a first discharge mainly induced by externally-applied voltage and a second discharge mainly induced by wall charges, and an assistant pulse is applied in a direction to increase the second discharge. The closest art, Hashimoto et al. as discussed above, either singularly or in combination, fails to anticipate or render the above limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance. "

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (703) 308-6413. The examiner can normally be reached on from Monday to Friday between 8:OOAM and 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shalwala Bipin, can be reached on (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance

Date 10-18-2004

Art Unit 2674

HENRY N. TRAN
PRIMARY EXAMINER